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| HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212 | | | EXAMINER LAZARO, DAVID R | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/674,843

Applicant(s)

LU ET AL.

Examiner

David Lazaro

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-24 are pending in this office action.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

- a. It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either an application data sheet or supplemental oath or declaration.
- b. It does not identify the mailing address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.
- c. It does not identify the citizenship of each inventor.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 18 recites the limitation "the common transport mechanism". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-18 and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by “Blue Tooth Protocol Architecture” by Sailesh Rathi, published in Dedicated Systems Magazine, 2000 (hereinafter Rathi).

8. With respect to claim 1, Rathi teaches a method for managing at least one transport connection comprising:

providing a generic architecture management framework (Page 29: Fig. 3);

creating at least one transport layer connection (Pages 30&32: host control transport layer);

adopting at least one profile from one transport protocol to another transport protocol (Page 32 : adopted protocols); and

reusing at least one profile component from one transport protocol for another transport protocol (Page 32: adopted protocols, for example the OBEX profiles of Bluetooth reuse components of the OBEX specification) via a central short range connectivity management mechanism (Pages 30&32: Host Controller Interface).

9. With respect to claim 2, Rathi further teaches where one protocol is a Bluetooth protocol (Page 1: Bluetooth).

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10. With respect to claim 3, Rathí further teaches where one protocol is a Universal Serial Bus protocol (Page 32 and 33, USB).

11. With respect to claim 4, Rathí further teaches where one protocol is an Infrared Data Association protocol (Page 32 - IrDA under OBEX).

12. With respect to claim 5, Rathí further teaches where one protocol is an RS232 protocol (Page 30, 32 and 33: RS-232).

13. With respect to claim 6, Rathí further teaches where one protocol is a wireless protocol (Page 1: Bluetooth, Page 32 - IrDA).

14. With respect to claim 7, Rathí further teaches where another protocol is a wired protocol (Page 32 and 33: RS-232 and USB).

15. With respect to claim 8, Rathí further teaches where the generic architecture framework comprises an object exchange related service (Page 32 OBEX).

16. With respect to claim 9, Rathí further teaches wherein managing at least one transport connection comprises providing a short range connectivity application, application engine and generic platform (Page 29-30: BaseBand, Link Manager, HCI).

17. With respect to claim 10, Rathí further teaches wherein managing the at least one transport connection further comprises service registration and discovery (Page 30 - service discovery protocol).

18. With respect to claim 11, Rathí further teaches wherein managing the at least one transport connection further comprises loading a connectivity component to perform channel reservation and service registration for a Bluetooth protocol (Page 32 - Fig. 6 - sdp component).

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19. With respect to claim 12, Rathi further teaches wherein managing the at least one transport connection further comprises loading a connectivity component to perform channel reservation and service registration for a Universal Serial Bus protocol (Page 32-33 - Fig.6 HCI component manages USB).

20. With respect to claim 13, Rathi further teaches wherein managing the at least one transport connection further comprises establishing a link between an object exchange data link library and a service controller (Page 29, 30 and 32 - Fig 3 - OBEX and SDP).

21. With respect to claim 14, Rathi further teaches wherein managing the at least one transport connection further comprises providing an application programming interface to manage at least one service for a Bluetooth protocol (Page 30 and 32: Host controller interface).

22. With respect to claim 15, Rathi further teaches wherein managing the at least one transport connection further comprises providing an application programming interface to manage at least one service for a Universal Serial Bus protocol (Page 30 and 32: Host controller interface).

23. With respect to claim 16, Rathi teaches a computer program stored on a computer readable media for directing a computer to execute a method that comprises:

creating at least one transport layer connection (Pages 30&32: host control transport layer);

processing transport layer initialization, connection, and registration functionality (Pages 30&32: host controller interface and sdp);

adopting at least one profile from one transport protocol to another transport protocol (Page 32 : adopted protocols); and

reusing at least one profile component from one transport protocol for at least one other transport protocol (Page 32: adopted protocols, for example the OBEX profiles of Bluetooth reuse components of the OBEX specification) via a central short range connectivity management mechanism (Pages 30&32: Host Controller Interface).

24. With respect to claim 17, Rathi teaches a mobile terminal, comprising a wireless transceiver (Page 29 - Bluetooth RF), a data processor, and a memory for use in communicating with at least one of a wired and a wireless protocol utilizing a transport software subsystem that is used in common with a plurality of transport protocols (Page 30 and 32: Host control transport layer provides common device driver interface for adopted transport protocols).

25. With respect to claim 18, Rathi further teaches where the common transport mechanism operates in conjunction with an operating system (Page 33: example OS-9).

26. With respect to claim 20, Rathi further teaches where one protocol is a Bluetooth protocol (Page 1: Bluetooth).

27. With respect to claim 21, Rathi further teaches where one protocol is a Universal Serial Bus protocol (Page 32 and 33, USB).

28. With respect to claim 22, Rathi further teaches where the common transport mechanism provides an application programming interface to manage at least one service for a Bluetooth protocol (Page 30 and 32: Host controller interface).

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29. With respect to claim 23, Rathi further teaches where the common transport mechanism provides an application programming interface to manage at least one service for a Universal Serial Bus protocol (Page 30 and 32: Host controller interface).

30. With respect to claim 24, Rathi teaches a method for managing at least one transport connection comprising

providing a generic architecture management framework (Page 29: Fig. 3),
creating at least one transport layer connection (Pages 30&32: host control transport layer),

adopting at least one profile from one transport protocol to another transport protocol (Page 32 : adopted protocols), and

reusing at least one profile component from one transport protocol for at least one other transport protocol (Page 32: adopted protocols, for example the OBEX profiles of Bluetooth reuse components of the OBEX specification) via a central short range connectivity management mechanism (Pages 30&32: Host Controller Interface),

wherein creating a transport layer connection comprises receiving a service management request and performing protocol registration through at least one of a socket server and a communication server (Pages 30&32: SDP and Host Controller Interface).

Claim Rejections - 35 USC § 103

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rathi in view of Applicant's admitted prior art.

33. With respect to claim 19, Rathi teaches all the limitations of claim 18, including a common transport mechanism that operates in conjunction with an operating system (Page 33: example 0S-9). Rathi does not explicitly disclose the operating system comprises a Symbian operating system.

However, applicant's admitted prior art indicates that the Symbian operating system is a known operating system that operates in conjunction with a transport mechanism used in common with transport protocols such as OBEX and Bluetooth (Pages 4 and 5 of the Specification).

Because both Rathi and applicant's admitted prior art teach operating systems that operate in conjunction with a common transport mechanism, it would have been obvious to one skilled in the art to substitute one operating system for the other to achieve the predictable result of an operating system operating in conjunction with a transport mechanism that is used in common with a plurality of transport mechanisms.

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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35. U.S. Patent 7,035,932 by Dowling. April 25, 2006. Discloses only downloading submodules needed for a particular transport API based on related submodules between similar transport protocols.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Lazaro
September 27, 2007